Message

**From:** Strynar, Mark [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=5A9910D5B38E471497BD875FD329A20A-STRYNAR, MARK]
**Sent:** 8/13/2018 12:03:22 PM
**To:** Leung, Lam-Wing H [LAM.H.LEUNG-1@chemours.com]
**CC:** Tal, Tamara [Tal.Tamara@epa.gov]; Swank, Adam [Swank.Adam@epa.gov]
**Subject:** RE: HFPO-DA in DMSO

Thanks Lam,

This solves one issue we had been seeing. I am guessing it would do this to any polyfluorinated carboxylic acid that has an ether linkage just with different kinetics.

Mark

**From:** Leung, Lam-Wing H [mailto:LAM.H.LEUNG-1@chemours.com]
**Sent:** Thursday, August 09, 2018 4:20 PM
**To:** Strynar, Mark <Strynar.Mark@epa.gov>
**Cc:** Tal, Tamara <Tal.Tamara@epa.gov>; Swank, Adam <Swank.Adam@epa.gov>
**Subject:** RE: HFPO-DA in DMSO

Hi Mark,

What you mentioned is not totally unexpected. It might not be commonly well-known in the literature but we (in Chemours) have practiced this chemistry in which DMSO is used as a catalyst to convert HFPO-DA to E1 (basically decarboxylation of HFPO-DA) at elevated temperatures (>80C). At 80C the conversion is rather high so I can only speculate that at room temperature, DMSO will likely catalyze the decarboxylation of HFPO-DA at a slower rate but it'll be noticeable. Hope this helps.

Best Regards,
Lam

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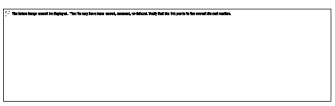

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**From:** Strynar, Mark [mailto:Strynar.Mark@epa.gov]
**Sent:** Thursday, August 09, 2018 3:10 PM
**To:** Leung, Lam-Wing H <LAM.H.LEUNG-1@chemours.com>
**Cc:** Tal, Tamara <Tal.Tamara@epa.gov>; Swank, Adam <Swank.Adam@epa.gov>
**Subject:** HFPO-DA in DMSO

Lam,

We have a curious finding in some work we are doing with HFPO-DA with some toxicology colleagues. If the HFPO-DA is dissolved in DMSO and stored in the freezer (20 mM) and measured the next day it is almost unchanged. If the same solution is stored in DMSO on the benchtop and measured the next day there are dramatic drops in concentration (>50 % or more). Any insight as to why. I have been thinking chemical change to compound or physical loss due to sorption.

Thanks,
Mark

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